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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09 890,326	07 30 2001	Tatsuya Ekinaka	OHSB-304	2053

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Sherman & Shalloway
413 North Washington Street
Alexandria, VA 22314

EXAMINER

PENG, KUO LIANG

ART UNIT	PAPER NUMBER
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1712

DATE MAILED: 07/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/890,326

Examiner

Kuo-Liang Peng

Applicant(s)

EKINAKA ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a) in no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 5/30/03 Amendment.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,6-9 and 13-18 is/are rejected.
- 7) ☒ Claim(s) 3-5,10-12 and 19-26 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 8
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: See Continuation Sheet

Continuation of Attachment(s) 6). Other: English translation of JP 59-109528.

DETAILED ACTION

1. The Applicants' amendment and supplemental information disclosure filed on May 30, 2003 was received. Claims 21 and 25 are amended.

2. The references cited in the information disclosure statement filed on May 30, 2003 are lined through because they have been cited in the information disclosure statement filed on October 25, 2001.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-2, 6, 8 and 13-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakayama (JP 59-109528).

With respect to Claims 1-2, 6 and 8, Nakayama discloses polycarbonate (page 3, upper left column) coated with a base coat and a top coat (page 3, upper left column). The base coat comprises a copolymer of alkoxysilyl acrylate of formula (3), vinyl alkoxysilane of formula (4) and other monomer such as methyl (meth)acrylate, hydroxyethyl (meth)acrylate, etc. A UV absorber can also be added (page 6, upper right column to page 6, lower right column, page 7, upper right column to page 7, lower left column and page 9, upper right column). The total amount of the alkoxysilyl acrylate of formula (3) and vinyl alkoxysilane of formula (4) can

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preferably be 2 to 40 wt% (page 7, lower left column). Therefore, the amount of the methyl (meth)acrylate, etc. can be at least 60 wt%. The top coat comprises A) 100 parts by weight of a trialkoxysilane of formula (1), B) 56-550 parts by weight of a hydrolyzate of a tetraalkoxysilane of formula (2) wherein e is 0, C) 4 to 334 parts by weight of a colloidal silica. The combined amount of B) and C) is preferably 60 to 567 parts of weight (page 3, upper right column to page 3, lower right column). Therefore, Nakayama does disclose a top coat comprises 55 to 62 wt% of A), 11 to 20 wt% of B) and 15 to 35 wt% of C).

With respect to Claim 13, the polycarbonate can be a bisphenol-type polycarbonate (page 9, lower left column).

With respect to Claims 14 and 17-18, the polycarbonate can be a spectacle lens, a ski goggle, automobile window, etc. having a base coat thickness of 0.1 to 5 microns and a top coat thickness of 1 to 30 microns (page 6, upper right column, page 9, lower left column to lower right column).

With respect to Claims 15-16, since Nakayama's composite reads on that of Applicants', they should have the same properties.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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8. Claims 7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakayama.

Nakayama discloses a coated polycarbonate wherein a UV absorber is incorporated in the base coat as described in paragraph 6, which is incorporated herein by reference. Since the UV absorber must be incorporated in the formulation properly and the UV absorber should not tend to bleach out, it should have an adequate solubility property in the formulation. In other words, the solubility property of the UV absorber is a result-effective variable. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to choose a UV absorber having whatever solubility property through routine experimentation in order to obtain a coating with suitable UV protection. Especially Applicants do not show the criticality of the solubility property in the specific solvent mixture set forth in the instant claims. See MPEP 2144.05 (II).

Response to Arguments

9. Applicant's arguments with respect to Claims 1-2 and 6-18 have been considered but are moot in view of the new ground(s) of rejection.

The rejections of the instant claims have been described above.

10. Claims 3-5, 10-12 and 19-26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Nakayama does not teach or suggest the use of a) an acrylic copolymer resin containing units of formula (I-d) set forth in Claims 3, 10 and 12, b) a base coat being formed of a mixture

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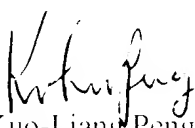
of an acrylic resin with a hydrolysis condensate of a compound of formula (I-e) set forth in Claims 4, 11, 19 and 21-23 and e) a base coat being formed of a mixture of an acrylic resin, a hydrolysis condensate of a compound of formula (I-e) and a melamine resin set forth in Claims 5, 20 and 24-26.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuo-Liang Peng whose telephone number is (703) 306-5550. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Dawson, can be reached on (703) 308-2340. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Klp
July 29, 2003


Kuo-Liang Peng
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